Saskatchewan
Highways and
Transportation

1998 Ferry Traffic

Annual Report

Operations Services
Southern Region

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1.0 Introduction

This annual report summarizes and presents analysis of the traffic that used the provincial ferry system in 1998. Traffic data was collected at the 12 open ferry sites on the highway system. Comparisons are made between traffic at the ferry sites and previous years.

This report examines the history of traffic volumes and the types of vehicles using each ferry. Examination of the distribution and composition of ferry traffic gives useful insights into the function of each ferry.

Your attention is drawn to the following points about the report:

- Difference between the data from ferry to ferry is as important as the data itself.
- The vehicle type data for some vehicles at many of the sites is too small a sample to support accurate conclusions.
- Data was collected at the Riverhurst ferry in 2 separate forms. The data collection form was changed after June 1,1998 to be compatible with all the other ferry sites and the highway system.
- The 1998 Riverhurst traffic data collected before June was manipulated to emulate the data form used after June 1 for summary and comparison purposes.

2.0 Background

The department operated 12 cable ferries during 1998, 11 on the North and South Saskatchewan rivers and one on Lake Diefenbaker. The ferry system has remained unchanged with the exception of the closure of the Cumberlain ferry since responsibility for the system was moved to the Department

Presently, ferry traffic data is collected by the ferry operators and forwarded to the Traffic Engineer for entry into the Department databases and reporting. This annual report documents the traffic tnat used the ferry system in 1998 and examines changes and trends in the traffic data.

3.0 Operating Season

All of the ferries, except Riverhurst, operate 12 hours per day from 7:00 AM to 7:00 PM. Riverhurst operates 24 hours per day. Ferries occasionally don't run during the season for reasons like mechanical failure or bad weather. The table below displays the total downtime with the season length. Details for the downtime are shown in Appendix A.

Ferry	Season			Hours
	Opening	Closing	Length(days)	Out of Service
Clarkboro	April 16th	Nov 13th	212	180
Estuary	April 14th	Nov 3rd	203	108
Hague	April 21st	Nov 14th	207	168
Lancer	April 13th	Nov 18th	219	120
Lemsford	April 18th	Nov 11th	207	48
Paynton	April 16th	Nov 7th	205	24
St. Laurent	April 16th	Nov 14th	212	132
Wingard	April 17th	Nov 7th	204	96
Riverhurst	April 30th	Dec 20th	242	36

Table 1. 1998 Ferry Season Statistics

4.0 Traffic Volumes

The table below summarizes the monthly traffic recorded in 1998 by ferry site.

Ferry Vehicles	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Year
St. Laurent	641	2909	2880	2453	3373	2693	1580	604		17,133
Cecil	274	2028	1761	1323	2381	1891	1270	306		11,234
Fenton	0	1064	1230	1292	1805	1510	1135	288		8,324
Weldon	430	4908	4454	3150	5342	4847	3985	887		28,003
Wingard	490	1994	2017	1782	2512	2046	1285	341		12,467
Estuary	595	1633	717	1644	1732	1516	1275	105		9,217
Lemsford	581	1818	1616	2593	2032	1487	1392	330		11,849
Lancer	476	1084	793	1070	1256	1012	994	282		6,967
Paynton	1532	4972	5120	5536	5624	4759	4107	803		32,453
Clarkboro	2535	7023	6733	3091	7340	6155	6085	1877		40,839
Hague	531	2222	2317	1234	2581	2108	1561	568		13,122
Riverhurst	888	5812	6307	9718	7521	6241	4759	3000	1669	45,915
Monthly Totals	**8,973**	**37,467**	**35,945**	**34,886**	**43,499**	**36,265**	**29,428**	**9,391**	**1,669**	**237,523**

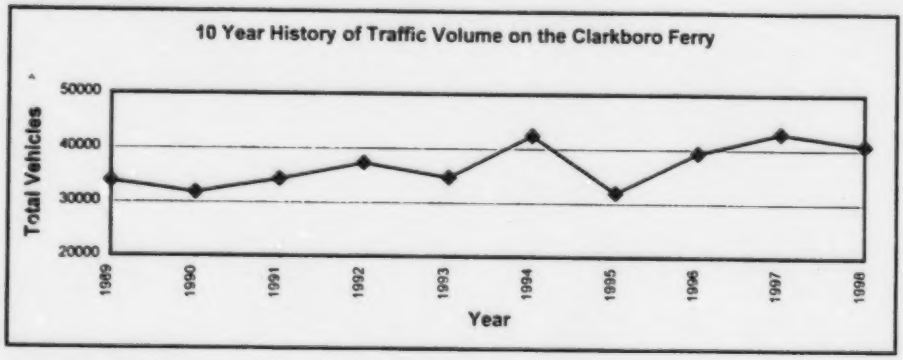
Table 2. 1998 monthly ferry traffic volumes.

To facilitate systematic analysis the ferry traffic data is grouped by geographical location. This system results in 4 groupings: Saskatoon, Prince Albert, Swift Current and North Battleford.

4.1 Saskatoon Area

The Saskatoon area group contains two ferries, Clarkboro and Hague. The Clarkboro and Hague ferries usually carry annual traffic in the 35 000 and 12 000 vehicle per year range, respectively. This year volumes at both locations decreased somewhat from the very high levels recorded in 1997 (see charts below). The Clarkboro ferry registered traffic volumes in 1998 that were about 15% above the historical average.

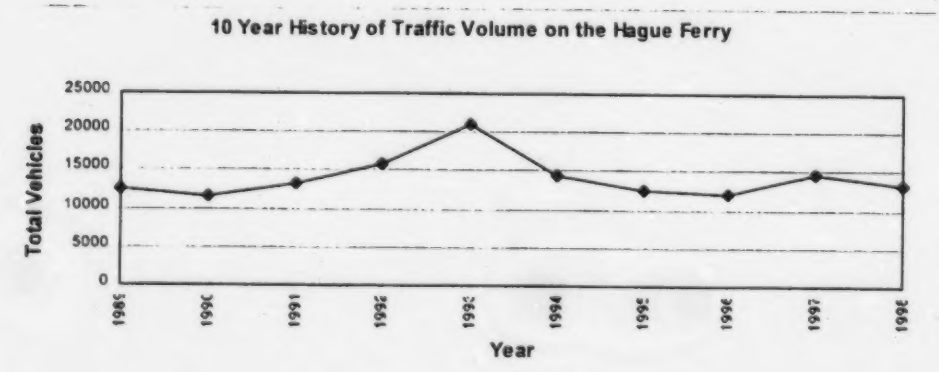
Chart 4.1A 10 year history of traffic on the Clarkboro ferry



1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
33884	31817	34291	37284	34674	42448	31975	39338	42991	40839

1998 Traffic on the Clarkboro ferry was approximately 15% above the 10 year average

Chart 4.1B 10 year history of traffic on the Hague ferry



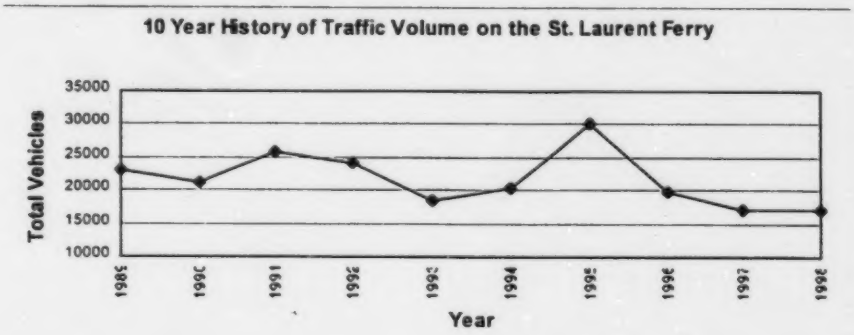
1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
12417	11578	13258	15700	20883	14442	12425	11961	14577	13122

1998 Traffic on the Hague ferry was very close to the 10 year average

4.2 Prince Albert Area

The Prince Albert area group contains the following six ferries: Cecil, Fenton, St. Laurent, Weldon, and Wingard.

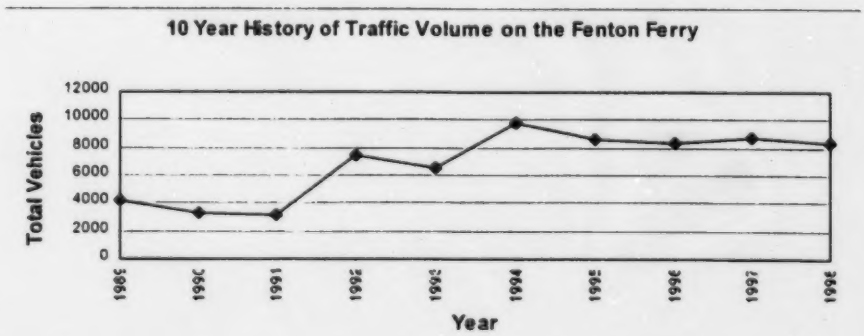
Chart 4.2A 10 year history of traffic on the St. Laurent ferry



1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
23155	21250	25842	24017	18556	20421	30030	19875	16987	17133

1998 Traffic on the St. Laurent ferry has fallen 15% below the 10 year average although during the last 2 years volumes appear to be stabilizing

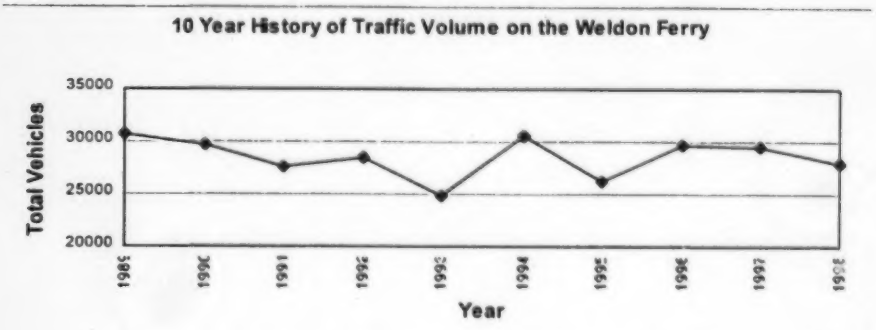
Chart 4.2B 10 year history of traffic on the Fenton ferry



1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
4147	3319	3079	7394	6517	9730	8582	8366	8716	8324

1998 Traffic on the Fenton ferry has been unchanged over the last 4 years after experiencing a sharp rise between the years 1991 through 1994

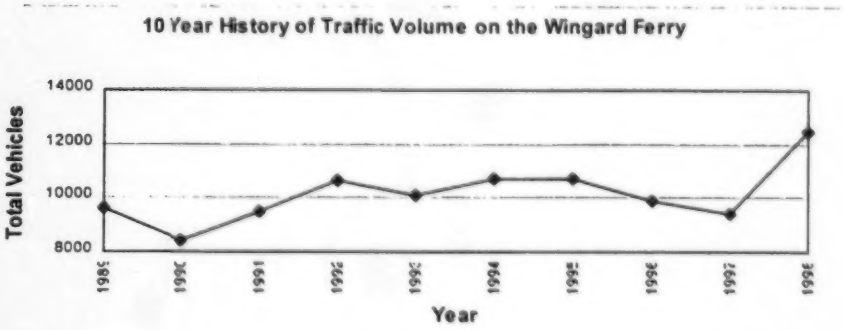
Chart 4.2C 10 year history of traffic on the Weldon ferry



1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
30702	29681	27586	28460	24754	30465	26268	29657	29455	28003

The Weldon ferry has carried stable volumes in the 25 to 30,000 range for the last 10 years. In 1998 the volume fell by some 1500 vehicles compared to the last 2 years.

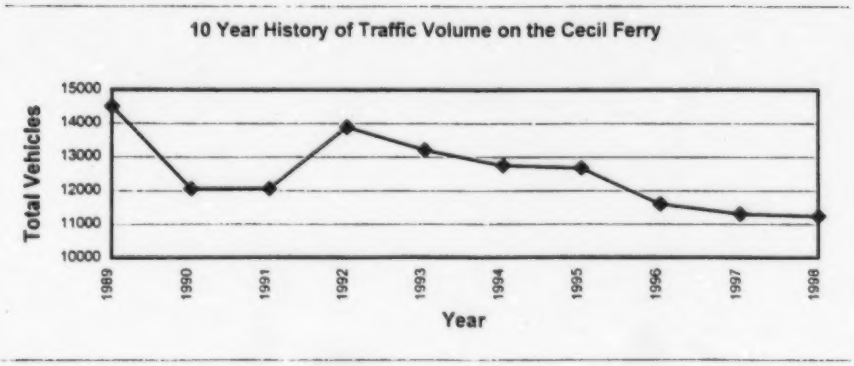
Chart 4.2D 10 year history of traffic on the Wingard ferry



1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
9604	8395	9511	10628	10115	10719	10687	9878	9420	12467

In 1998 Traffic on the Wingard ferry rose sharply to 25% above the 10 year average

Chart 4.2E 10 year history of traffic on the Cecil ferry



1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
14505	12058	12054	13887	13210	12752	12678	11603	11303	11234

In 1998 Traffic on the Cecil ferry was just below the 10 year average

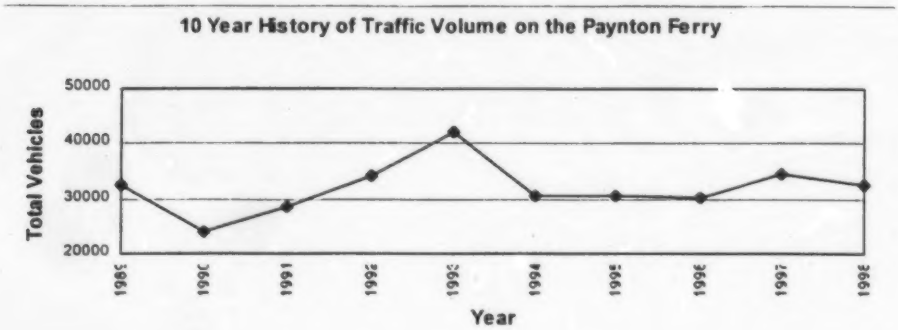
Summary

Overall, traffic on the ferries in the Prince Albert area are relatively stable, Wingard being the exception. Traffic volumes were down very slightly on most ferries in 1998. In total, the 1997 traffic volumes on the Prince Albert area ferries are down 4 ½ % from one year ago. The monthly traffic is displayed in Table 2.

4.3 North Battleford Area

The North Battleford area has only the Paynton ferry. Paynton has carried an average of 31 900 over the past ten years (see chart below). The traffic volume at Paynton fell sharply to 24 000 vehicles in 1990 and then climbed to 42 000 by 1993. Traffic volumes between 1994 and 1996 were quite stable at 30 500 vehicles per year and then increased to 35 000 in 1997. To examine the monthly traffic see Table 2.

Chart 4.3A 10 year history of traffic on the Paynton ferry



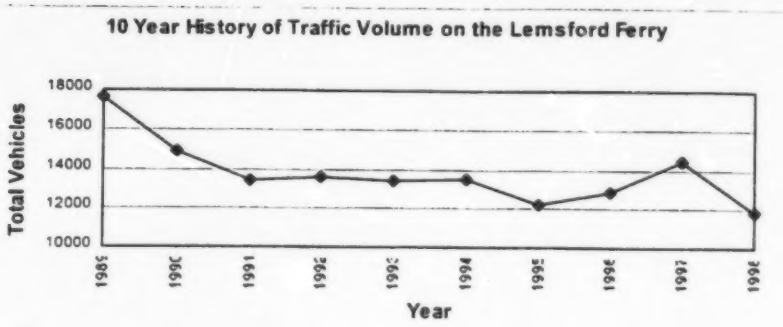
1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
32436	24066	28662	34293	42058	30686	30453	30172	34365	32453

Traffic on the Paynton ferry has been stable in the low 30,000 per year range or the last 5 years. In 1998 traffic fell off somewhat from the minor rise recorded last year. The high traffic recorded over the last 2 years is likely attributable to longer than average season lengths.

4.4 Swift Current Area

The Swift Current area has four ferries: Estuary, Lancer, Lemsford, and Riverhurst.

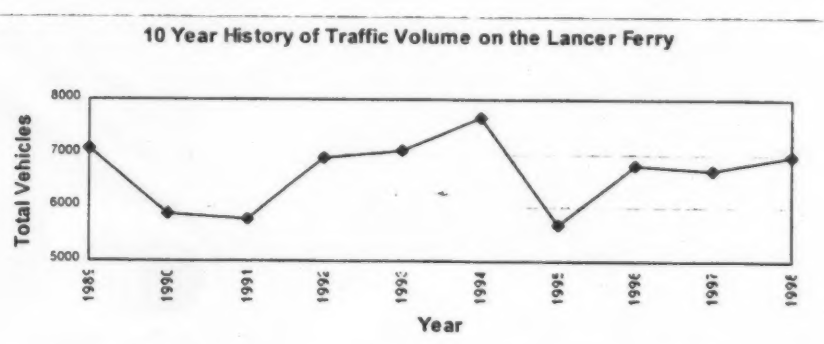
Chart 4.4A 10 year history of traffic on the Lemsford ferry



1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
17589	14873	13368	13588	13381	13471	12170	12805	14393	11849

In 1998 Traffic on the Lemsford ferry declined by 18% from the 1987 volume to a new 10 year low. Lemsford had been relatively stable but gently declining for most of the last 7 years.

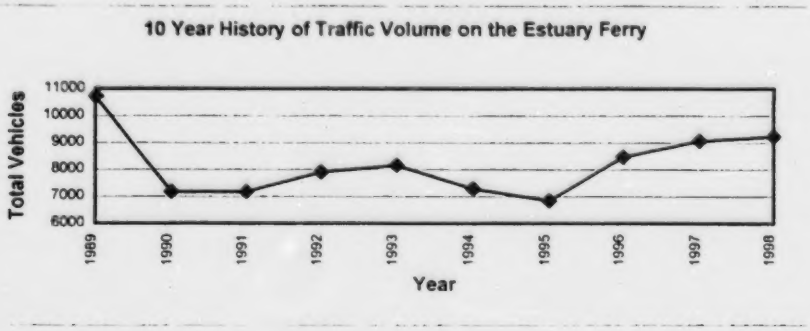
Chart 4.4B 10 year history of traffic on the Lancer ferry



1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
7094	5862	5779	6928	7047	7649	5673	6789	6685	6967

Traffic volumes on the Lancer ferry have varied considerably over the last 10 years. In 1998 the traffic volume was only 300 vehicles above the ten-year average of 6650 vehicles. In 1998 Lancer carried the lowest volume in the province for the second year in a row.

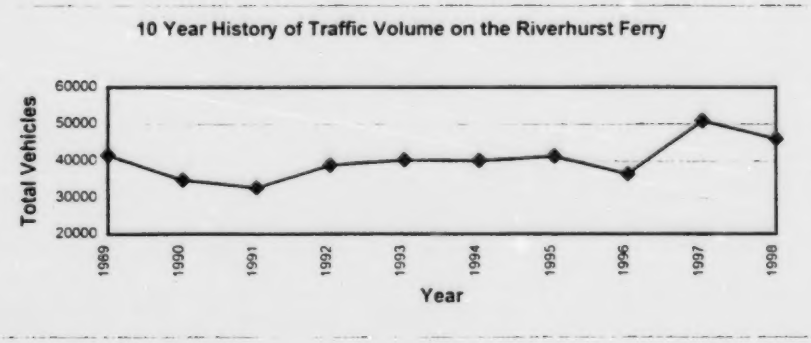
Chart 4.4C 10 year history of traffic on the Estuary ferry



1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
10718	7175	7172	7900	8153	7278	6844	8463	9058	9217

The Estuary ferry's historical traffic pattern is similar to Lemsford. It showed a decreasing trend that leveled off from 1990-1995, and has increased in the last three years. In 1998 the traffic volume is about 85% of the 1988 volume.

Chart 4.4D 10 year history of traffic on the Riverhurst ferry



1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
41575	34792	32613	38835	40242	40076	41291	36449	50766	45915

Traffic volumes on the Riverhurst remained well above historical levels in 1998 although down approximately 9% from the 1997 record level. The sharp increase that occurred in 1997 was likely due to the emergence of the seed potato industry centred on Lucky Lake combined with the longest operational season on record. Traffic declined from 1997's high traffic levels because the 1998 operational season was of a more normal length.

The Riverhurst ferry is the largest and most sophisticated cable ferry in the province. It is situated on highway No. 42 and carries highway traffic two kilometres across Lake Diefenbaker. The Riverhurst ferry is the only ferry still in operation on the provincial highway system.
The Riverhurst ferry had carried stable traffic volumes in the 40 000 vehicles per year range during the last ten years. Volumes increased sharply in 1997. In part the 1997 increase in total traffic was due to the very long season(from early May until January 3rd 1998). The long season added approximately 3400 extra vehicles between the normal season end in mid-November and the actual season end in early January 1998. The extraordinarily late season does not explain the increase of 14 300 vehicles from 1996. This is the largest increase and the largest volume in the ferry's ten-year history. Monthly traffic is displayed in Table 2.
The additional traffic was almost certainly generated by economic activity related to the seed potato industry that has developed around Lucky Lake just north of the lake.
A table and a graphical plot of 10 year historical traffic volumes at all the ferries in the province can be found in Appendix C.

5.0 Vehicle Classifications

Ferry operators record the traffic using the ferries by vehicle type. An analysis of the type of traffic using each ferry and by extension the movement of vehicle types within the larger area around the ferry is done each year.

Unfortunately, until the beginning of July, traffic at the Riverhurst ferry was recorded using an older vehicle classification system based on license type. Data collection was changed to be compatible with the rest of the ferry and the highway system in the month of July. To facilitate analysis the data collected before July was converted into an approximation of the current standard form. Both types of data are shown for Riverhurst in Appendix A.

Vehicle classifications are divided into the same geographical areas used for traffic volumes.

5.1 Saskatoon Area

The main difference between traffic at Hague opposed to Clarkboro is the amount of trucks carried. Hague carries 9% heavy trucks versus only 3% at Clarkboro. According to the 1996 annual report, Clarkboro carries a greater percentage of cars than ½ ton trucks and greater total volume than Hague. Furthermore, as noted in Section 4, the Clarkboro ferry carries approximately three times the total volume of the Hague ferry.

This would suggest that Clarkboro serves as a commuter route to Saskatoon and Hague serves rural communities. The location of the ferries confirms this as Hague is about twice the distance from Saskatoon as Clarkboro.

Chart 5.1A Vehicle Types using the Hague ferry

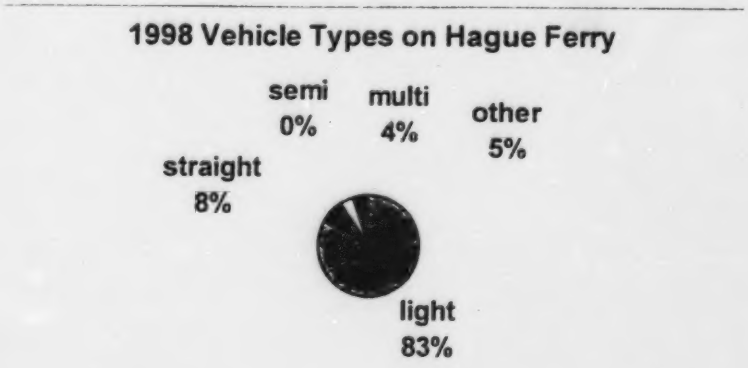
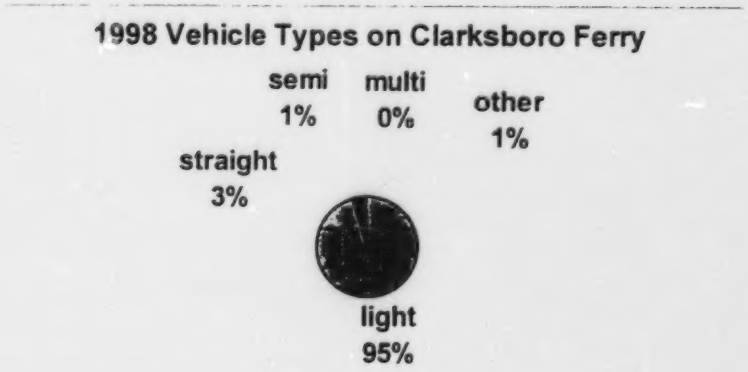


Chart 5.1B Vehicle Types using the Clarksboro ferry



The Hague and Clarksboro ferries carry a significantly different mix of vehicle types. Hague is characterized by much lower traffic volumes than found at Clarksboro and a high percentage of "other" vehicles and non-articulated trucks. In an agricultural setting, vehicles recorded as "Other" are normally self-propelled farm equipment. As described in previous annual reports the Hague ferry services the local farming community while Clarksboro ferry carries predominately passenger (light) vehicles commuting into Saskatoon.

5.2 *Prince Albert Area*

The Prince Albert area contains the Cecil, Fenton, Wingard, St. Laurent, and Weldon ferries. The vehicle mix at each ferry is displayed in the graphs below.

Cecil, Weldon, and Wingard carry a greater proportion of heavy trucks than the other two ferries. The high percentage of non-articulated trucks at Cecil indicate it is on a haul route for agricultural products. Weldon and Wingard carry vehicle types that are indicative of a local route used by farmers on a day to day basis as they go about working their land. Both had moderate numbers of non-articulated trucks and a significant amount of vehicles normally interpreted as farm equipment. Traffic at the Fenton and St Laurent ferries was almost exclusively passenger vehicles.

Chart 5.2A Vehicle Types using the Cecil ferry

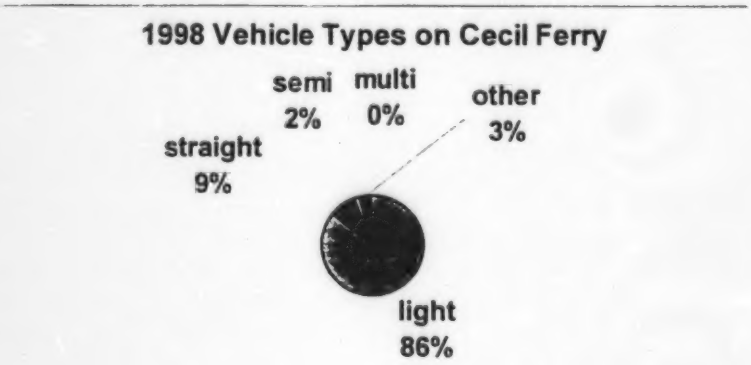


Chart 5.2B Vehicle Types using the Weldon ferry

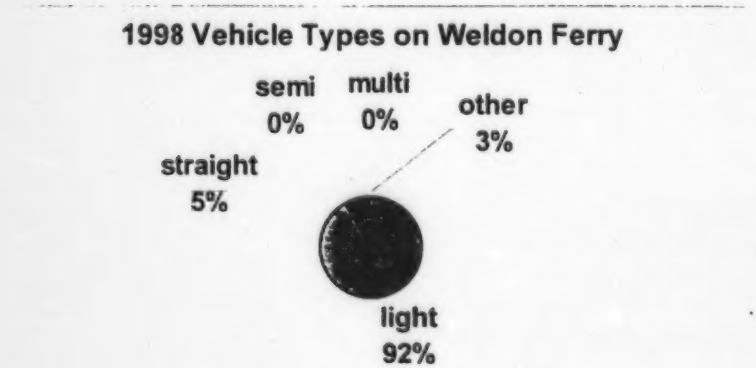


Chart 5.2C Vehicle Types using the Wingard ferry

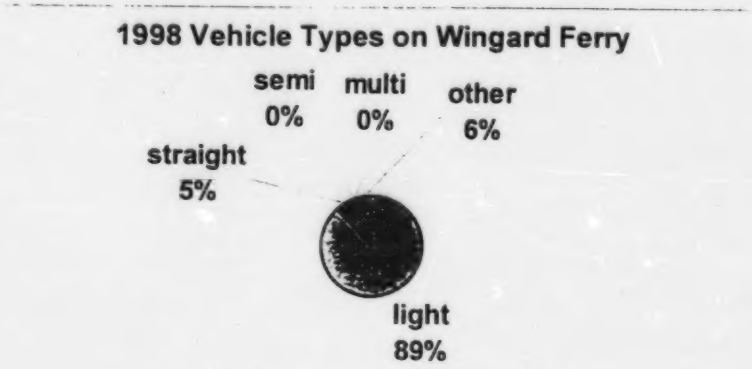


Chart 5.2D Vehicle Types using the Fenton ferry

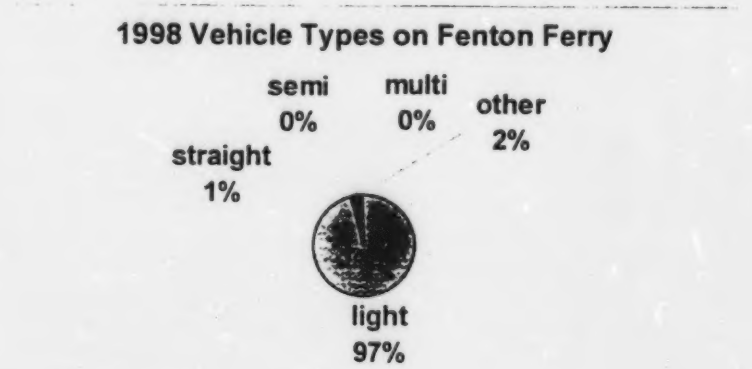
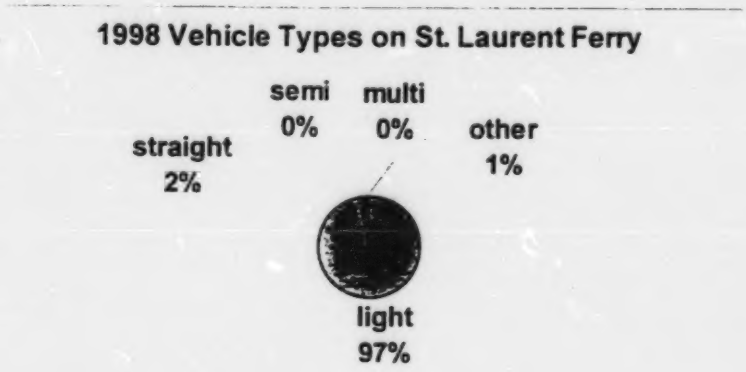


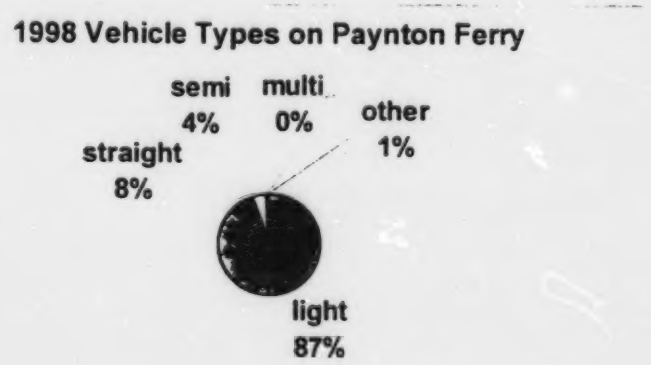
Chart 5.2E Vehicle Types using the St. Laurent ferry



5.3 North Battleford Area

The Paynton ferry is the only ferry in the North Battleford area. This ferry serves a predominately rural population as shown by the high percentage non-articulated trucks. Paynton also serves as a link to highway No.16 for freight haul as shown by the relatively high percentage of single trailer semis that used the ferry in 1998.

Chart 5.3A Vehicle Types using the Paynton ferry



5.4 Swift Current Area

The Swift Current area ferries all serve predominately rural populations. The Lemsford and Lancer ferries carry almost an identical vehicle mix. Both carry small percentages of non-articulated (farm) trucks and equipment as well a small numbers of commercial trucks (single trailer semis). The Estuary ferry is unique in this area in that it carries a fairly high percentage of farm trucks and an almost equal percentage of farm equipment. Estuary apparently is connects cattle operations south of the river to large hay flats located along the north side of the river.

The Riverhurst ferry is the largest and most sophisticated cable ferry in the system. It is also the only ferry located on the provincial highway system. The vehicle mix clearly shows that Riverhurst is a link in the highway system and is a vital link in the agricultural area around the crossing. Although Riverhurst has always carried a significant number of freight haulers, the last 2 years has seen a major increase in large articulated trucks as the seed potato industry centred around Lucky Lake has begun production.

Chart 5.4A Vehicle Types using the Lancer ferry

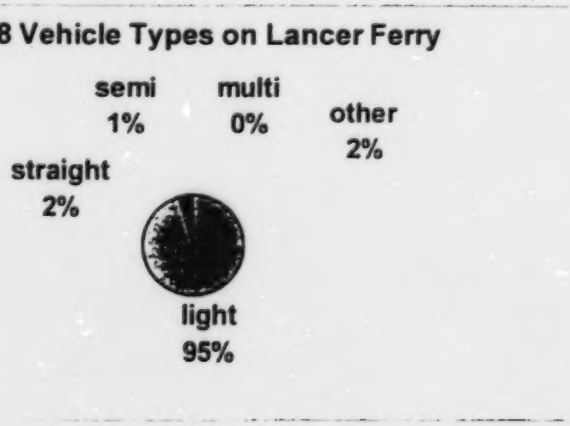


Chart 5.4B Vehicle Types using the Lemsford ferry

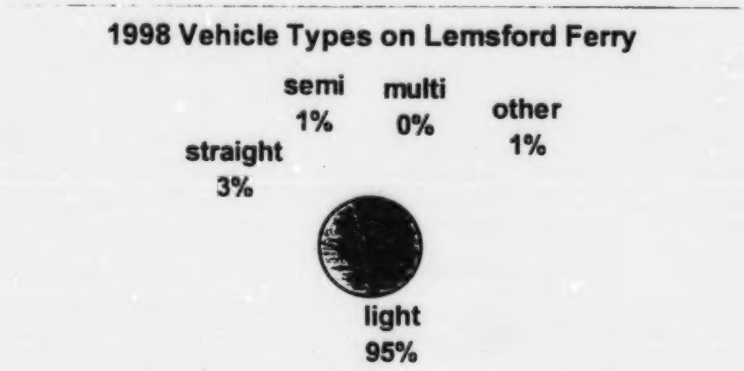


Chart 5.4C Vehicle Types using the Estuary ferry

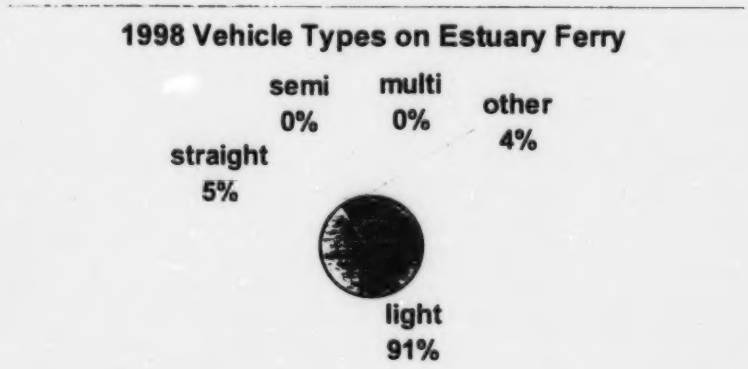
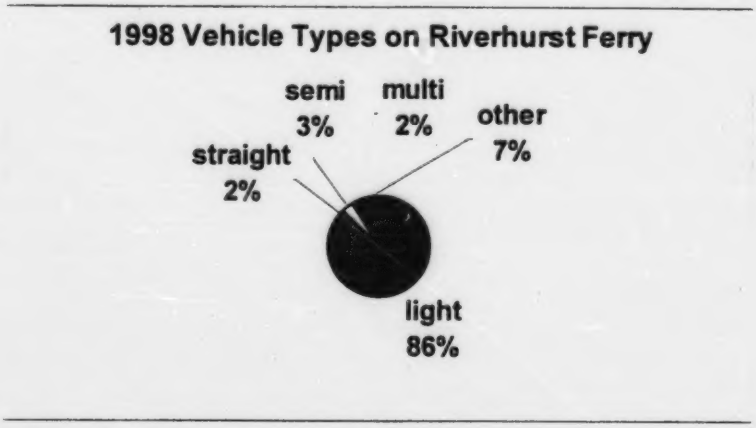


Chart 5.4D Vehicle Types using the Riverhurst ferry



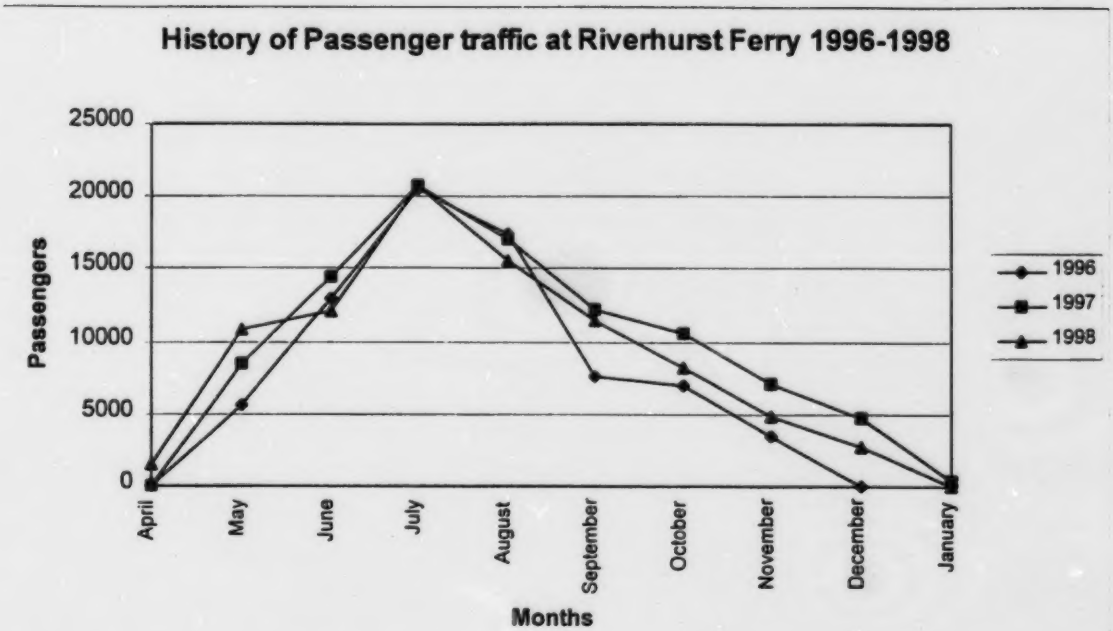
Vehicle type comparisons can not be readily or accurately made at Riverhurst because the vehicle type classification system was changed in 1998.

6.0 Passengers

Passenger information has been gathered at the Riverhurst ferry since 1996. The table and graph below show the passenger history at Riverhurst since 1996

Riverhurst Ferry										
Passengers	April	May	June	July	August	September	October	November	December	January
1996		5539	12953	20471	17414	7631	6916	3431	CLOSED	CLOSED
1997		8437	14435	20828	17075	12162	10524	7093	4756	361
1998	1485	10882	12048	20767	15557	11427	8208	4895	2687	CLOSED

Table 3 – Passengers on Riverhurst Ferry



7.0 Conclusions

- In 1998 the ferry system was operating near the 10 year average traffic levels
- The ferry system is still well utilized. Year to year traffic fluctuations at individual ferries seem to be caused by differences in the length of the operational system, weather, or local factors exterior to the highway system.
- In previous studies the ferries were classified as either urban feeder links or rural traffic by the ratio of cars to pickups. These classifications could not be made in the 1997 study because the data collection format was changed grouping these two vehicle types as LGT (light or passenger).

7.1 Operating Season/Downtime

- Apart from minor downtime to do routine repairs the ferries continuously except during the normal high water that occurs each year in June.
- Mechanical problems were usually fixed within hours. Without exception there were no major breakdowns in 1998.

7.2 Traffic Volumes

- The Clarkboro ferry carried a ten-year high volume in 1997.

- Traffic on Prince Albert-area ferries appears to be decreasing. Four of the five ferries carried less traffic in 1997 than in 1996 and two of them, St. Laurent and Cecil, recorded ten-year lows.
- Lemsford and Estuary volumes appear to be recovering in the last three years after dropping 1/3 of their volume in the previous seven years.
- Riverhurst had the largest annual change in total volume, up 14 300 vehicles from 1996, a 10 year high volume.

7.3 Traffic Classification

- Five different forms forced classifying vehicles into one of only three categories, limiting conclusions that could be made on vehicle classifications.
- Paynton returned to more historical levels of heavy trucks in the 12 % range. There appears to have been some hauling activity in the Paynton area during 1996 and 1997, that used this route.
- The Riverhurst ferry classification data was consistent with 1997 but markedly different than anything recorded prior to the emergence of the seed potato industry around Lucky Lake.

8.0 Recommendations

1) Further investigation of traffic flow on the municipal roads in the Prince Albert area might help explain the recent low ferry volumes.

2) Traffic volumes on Riverhurst ferry should continue to be watched to document the development of the seed potato haul over the next several years. Additional monitoring may be required to determine if the existing ferry is capable of handling the extra volume in an effective manner.

3) The department may wish to collect the number of passengers using the ferry system at all the ferries in future years.

Appendix A DOWNTIME ON PROVINCIAL FERRIES

April 1998 Ferry Data

Name of Ferry	LGT	Straight Trucks	Semi Trailer	Multi-Trailer	Other	Total Vehicles	First Car on...
Clarkboro	2457	52	11	0	15	2535	April 16th
Estuary	549	29	0	0	17	595	April 14th
Hague	431	41	1	0	58	531	April 21st
Lancer	427	30	14	0	5	476	April 13th
Lemsford	531	34	8	0	8	581	April 18th
Paynton	1281	170	67	0	14	1532	April 16th
Riverhurst	665	42	43	32	49	831	April 23 at 19:00 hrs
St. Laurent	624	17	0	0	0	641	April 16th
Cecil	147	100	22	0	5	0	April 27th
Fenton	0	0	0	0	0	0	April 29th
Weldon	354	36	0	0	40	0	April 27th
St Laurent	624	17	0	0	0	0	April 16th
Wingard	428	35	0	0	27	0	April 17th
Totals	8,518	603	166	32	238	7,722	

St. Laurent closed April 19th - 20th

May 1998 Ferry Data

Name of Ferry	LGT	Straight Trucks	Semi Trailer	Multi-Trailer	Other	Total Vehicles
Clarkboro	6745	206	43	0	29	7023
Estuary	1558	47	0	0	28	1633
Hague	1835	180	4	0	203	2222
Lancer	1040	22	13	0	9	1084
Lemsford	1707	69	17	25	0	1818
Paynton	4406	352	145	0	69	4972
Riverhurst	4807	210	211	139	445	5812
St. Laurent	2817	48	0	0	44	2909
Cecil	1625	251	72	3	77	2028
Fenton	1055	7	0	0	2	1064
Weldon	4394	288	1	0	225	4908
St Laurent	2817	48	0	0	44	2909
Wingard	1762	135	0	0	97	1994
Totals	36,568	1,863	506	167	1,272	40,376

Lemsford closed May 31st? (No data recorded for that day)

June 1998 Ferry Data

Name of Ferry	LGT	Straight Trucks	Semi Trailer	Multi-Trailer	Other	Total Vehicles
Clarkboro	6493	180	40	0	20	6733
Estuary	694	6	0	0	17	717
Hague	2065	99	9	0	144	2317
Lancer	783	5	0	0	5	793
Lemsford	1564	48	4	0	0	1616
Paynton	4482	411	175	0	52	5120
Riverhurst	5425	154	155	82	489	6305
St. Laurent	2781	46	0	0	53	2880
Cecil	1586	124	6	0	45	1761
Fenton	1188	13	0	0	29	1230
Weldon	4244	100	4	0	106	4454
St Laurent	2781	46	0	0	53	2880
Wingard	1765	146	8	0	98	2017
Totals	35,851	1,378	401	82	1,111	38,823

Estuary closed June 1st - 2nd and 20th - 30th (High waters)
Lancer closed June 21st - 28th (High waters)
Lemsford closed June 24th - 26th (High waters)

July 1998 Ferry Data

Name of Ferry	LGT	Straight Trucks	Semi Trailer	Multi-Trailer	Other	Total Vehicles
Clarkboro	2988	54	15	0	34	3091
Estuary	1303	158	0	0	183	1644
Hague	1068	83	2	0	81	1234
Lancer	1032	10	0	0	28	1070
Lemsford	2508	68	7	0	10	2593
Paynton	4927	478	83	0	48	5536
Riverhurst	5425	154	155	82	489	6305
St. Laurent	2391	28	0	0	34	2453
Cecil	1251	45	6	2	19	1323
Fenton	1262	2	0	0	28	1292
Weldon	3002	77	0	1	70	3150
St Laurent	2391	28	0	0	34	2453
Wingard	1595	68	2	0	117	1782
Totals	31,143	1,253	270	85	1,175	33,926

Clarkboro closed July 3rd - 17th (High waters)
Estuary closed July 1st - 2nd, 5th and 7th - 10th (High waters)
Hague closed July 4th - July 17th (High waters)
Lancer closed July 9th - 10th
Riverhurst closed July 22nd from midngiht to 8pm (Repairs)
St. Laurent closed July 8th - 16th
Wingard closed July 6th -13th (High waters)

August 1998 Ferry Data

Name of Ferry	LGT	Straight Trucks	Semi Trailer	Multi-Trailer	Other	Total Vehicles
Clarkboro	7040	212	36	0	52	7340
Estuary	1637	75	0	0	20	1732
Hague	2078	243	9	0	251	2581
Lancer	1186	22	12	0	36	1256
Lemsford	1952	34	9	0	37	2032
Paynton	4991	462	135	0	36	5624
Riverhurst	6638	117	131	86	549	7521
St. Laurent	3310	39	3	0	21	3373
Cecil	1985	243	45	0	108	2381
Fenton	1718	18	0	0	69	1805
Weldon	4897	272	4	0	169	5342
St Laurent	3310	39	3	0	21	3373
Wingard	2228	86	47	0	151	2512
Totals	42,970	1,862	434	86	1,520	46,872

September 1998 Ferry Data

Name of Ferry	LGT	Straight Trucks	Semi Trailer	Multi-Trailer	Other	Total Vehicles
Clarkboro	5837	223	55	0	40	6155
Estuary	1337	70	0	0	109	1516
Hague	1577	243	8	0	280	2108
Lancer	977	6	5	0	24	1012
Lemsford	1381	71	15	0	20	1487
Paynton	4092	444	175	0	48	4759
Riverhurst	5133	152	305	116	451	6157
St. Laurent	2595	60	0	0	38	2693
Cecil	1536	179	72	0	104	1891
Fenton	1422	34	0	0	54	1510
Weldon	4182	465	4	0	196	4847
St Laurent	2595	60	0	0	38	2693
Wingard	1858	78	2	0	108	2046
Totals	34,522	2,085	641	116	1,510	38,874

October 1998 Ferry Data

Name of Ferry	LGT	Straight Trucks	Semi Trailer	Multi-Trailer	Other	Total Vehicles
Clarkboro	5795	229	45	0	16	6085
Estuary	1184	79	0	0	12	1275
Hague	1310	105	2	0	144	1561
Lancer	971	14	2	0	7	994
Lemsford	1328	39	12	0	13	1392
Paynton	3532	360	206	0	9	4107
Riverhurst	4071	96	214	94	278	4753
St. Laurent	1523	25	0	0	32	1580
Cecil	1235	35	0	0	0	1270
Fenton	1113	12	0	0	10	1135
Weldon	3839	65	9	0	72	3985
St Laurent	1523	25	0	0	32	1580
Wingard	1124	47	0	0	114	1285
Totals	28,548	1,131	490	94	739	31,002

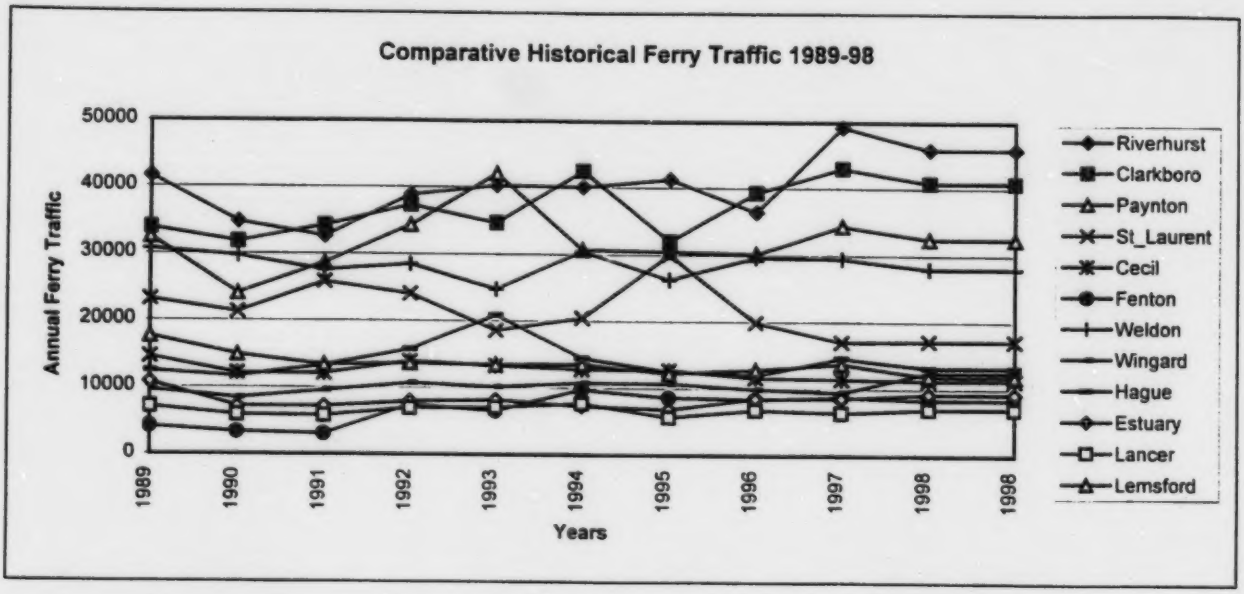
November 1998 Ferry Data

Name of Ferry	LGT	Straight Trucks	Semi Trailer	Multi-Trailer	Other	Total Vehicles	
Clarkboro	1808	57	12	0	0	1877	Closed Nov 14/98
Estuary	100	5	0	0	0	105	Closed Nov 3/98
Hague	493	32	7	36	0	568	Closed Nov 14/98
Lancer	272	10	0	0	0	282	Closed Nov 11/98
Lemsford	321	9	0	0	0	330	Closed Nov 11/98
Paynton	677	85	41	0	0	803	Closed Nov 7/98
Riverhurst	2498	95	204	55	150	3002	
St. Laurent	586	7	0	0	11	604	Closed Nov 14/98
Cecil	284	8	14	0	0	306	Closed Nov 9/98
Fenton	281	4	0	0	3	288	Closed Nov 9/98
Weldon	865	4	3	0	15	887	Closed Nov 9/98
St Laurent	586	7	0	0	11	604	Closed Nov 9/98
Wingard	283	15	0	0	43	341	Closed Nov 9/98
Totals	9,054	338	281	91	233	9,997	

December 1998 Ferry Data

Name of Ferry	LGT	Straight Trucks	Semi Trailer	Multi-Trailer	Other	Total Vehicles	
Clarkboro						0	
Estuary						0	
Hague						0	
Lancer						0	
Lemsford						0	
Paynton						0	
Riverhurst	1342	48	100	71	102	1663	Closed Dec 20
St. Laurent						0	
Cecil						0	
Fenton						0	
Weldon						0	
St Laurent						0	
Wingard						0	
Totals	1,342	48	100	71	102	1,663	

Appendix B HISTORIC TRAFFIC VOLUMES



	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1998
Riverhurst	41575	34792	32613	38835	40242	40076	41291	36449	49284	45915	45915
Clarkboro	33884	31817	34291	37284	34674	42448	31975	39338	42991	40839	40839
Paynton	32436	24066	28662	34293	42058	30686	30453	30172	34365	32453	32453
St_Laurent	23155	21250	25842	24017	18556	20421	30030	19875	16987	17133	17133
Cecil	14505	12058	12054	13887	13210	12752	12678	11603	11404	11234	11234
Fenton	4147	3319	3079	7394	6517	9730	8582	8366	8716	8324	8324
Weldon	30702	29681	27586	28460	24754	30465	26268	29657	29455	28003	28003
Wingard	9604	8395	9511	10628	10115	10719	10687	9878	9420	12467	12467
Hague	12417	11578	13258	15700	20883	14442	12425	11961	14577	13122	13122
Estuary	10718	7175	7172	7900	8153	7278	6844	8463	8563	9217	9217
Lancer	7094	5862	5779	6928	7047	7649	5673	6789	6381	6967	6967
Lemsford	17589	14873	13368	13588	13381	13471	12170	12805	13700	11849	11849

Appendix C

CONVERSION OF RIVERHURST DATA TO STANDARD SYSTEM

Conversion of old classification scheme into standard system

Summary 1998 Ferry Data - Riverhurst

Date	Farm Eq.	Train	PV	RV	Bus	TRSP	DG. G	Total Vehicles	Total Passengers
April	38	32	665	11	0	85	0	831	1391
May	180	139	4807	253	12	413	8	5812	10882
June	161	82	5425	318	10	306	3	6305	12048
Totals	379	253	10897	582	22	804	11	12948	24321
Percentages	2.9%	2.0%	84.2%	4.5%	0.2%	6.2%	0.1%	100.0%	
Averages	126	84	3,632	194	7	268	4	4,316	8,107

Month	LGT	Straight Trucks	Semi Trailer	Multi Trailer	Other	Total Vehicles	Total Passengers
April	665	42	43	32	49	831	1391
May	4807	210	211	139	445	5812	10882
June	5425	154	155	82	489	6305	12048
Totals	10897	406	409	253	983	12948	24321
Percentages	84.2%	3.1%	3.2%	2.0%	7.6%	100.0%	187.8%
Averages	3,632	135	136	84	328	4,316	8,107

Month	LGT	Straight Trucks	Semi Trailer	Multi Trailer	Other	Total Vehicles	Total Passengers
July	8477	199	148	59	836	9719	20766
August	6638	117	131	86	549	7521	15557
September	5133	152	305	116	451	6157	11286
October	4071	96	214	94	278	4753	8209
November	2498	95	204	55	150	3002	4891
December	1342	48	100	71	102	1663	2687
Totals	28159	707	1102	481	2366	32815	63396
Percentages	85.8%	2.2%	3.4%	1.5%	7.2%	100.0%	
Averages	4,693	118	184	80	394	5,469	10,566

Month	LGT	Straight Trucks	Semi Trailer	Multi Trailer	Other	Total Vehicles	Total Passengers
April	665	42	43	32	49	831	1391
May	4807	210	211	139	445	5812	10882
June	5425	154	155	82	489	6305	12048
July	8477	199	148	59	836	9719	20766
August	6638	117	131	86	549	7521	15557
September	5133	152	305	116	451	6157	11286
October	4071	96	214	94	278	4753	8209
November	2498	95	204	55	150	3002	4891
December	1342	48	100	71	102	1663	2687
Totals	39,056	1,113	1,511	734	3,349	45,763	87,717
Percentages	85.3%	2.4%	3.3%	1.6%	7.3%	100.0%	
Averages	4,340	124	168	82	372	5,085	10,566

Appendix D VEHICLE CLASSIFICATION FORMS

Saskatchewan Highways and Transportation

Ferry Traffic Data Summary

Ferry crossing_____ File No._____ Month of_____ ,199___

Shift					
Day	LGT	Straight Trucks	Semi Trailer	Multi Trailer	Other
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
Totals					

Statement Certified Correct

_____

Ferry operator

KEY

LGT	-Cars & Pickups
Straight Trucks	-Non-articulated
Semi Trailer	-Single Trailer
Multi-Trailer	-2 or more Trailers

Notes:

1) "Other" includes farm or construction equipment etc.
2) Give details in "Comments" ie: dangerous goods, equipment type, product hauled etc.

Riverhurst Ferry Traffic Data

Sheet No.

_____ 2. _____

	Engine R.P.M.	Weather				Regular crew Name (please print)	Casual crew called Name	Accept	Refuse
		Wind(Kmh)	Sky	Surface	Temp				